## EFFICACY REVIEW

DATE: IN 8-21-00 OUT 9- 7-00

FILE OR REG. NO
PETITION OR EXP. PERMIT NO
DATE DIV. RECEIVED July 31, 2000
DATE OF SUBMISSION July 28, 2000
DATE SUBMISSION ACCEPTED
TYPE PRODUCT(S): (I,)D, H, F, N, R, S
DATA ACCESSION NO(S). 451841-02;D268308;S583963;Case#040879;AC:345
PRODUCT MGR. NO. 03-Layne/Sproat
PRODUCT NAME(S) DRY PYROCIDE® Insecticide
COMPANY NAMEMcLaughlin Gormley King Company
SUBMISSION PURPOSE Provide performance data in support of claims
for 6 months residual effectiveness against Ger-
man & American cockroaches, other crawling pests.
CHEMICAL & FORMULATION Pyrethrins 1.00%  Piperonyl butoxide, technical 10.00%  Silicon dioxide 60.00%  (0.13 gm/cm³ bulk density ready-to-use dust)

CONCLUSIONS & RECOMMENDATIONS The data presented in EPA Accession (MRID) Number 451841-02, having been obtained from standard laboratory testing conducted according to requirements of § 95-11(b)(1) through (7) on p. 268 and meeting the standards of § 95-11(c)(2)(i) on p. 270 of the Product Performance Guidelines to the extent that principles designed for residual sprays are also applicable to dust and powder formulations, are adequate to demonstrate that formulations identical or very similar to the subject product are able to: (1) kill black widow spider, Latrodectus hesperus, in from 24 to 48 hours following 1 hour forced exposure to 0.42 gm/ft2 deposit in paper cups; (2) kill brown dog tick, Rhipicephalus sanguineus, in 24 hours following 1 hour forced exposure to 0.42 gm/ft2 deposit on net pouches; (3) kill cat flea, Ctenocephalides felis, in 24 hours following 1 hour forced exposure to 0.42 gm/ft2 deposit in plastic jars; (4) residual control of mixed-sex nymphs of the American cockroach, Periplaneta americana, and mixed-sex adults of Oriental cockroach, Blatta orientalis, in 24 and 48 hours (to be continued)

following exposure to deposits of 1.5 oz./100 ft2 aged up to 8 weeks, in plastic containers; (5) knockdown of adult male German cockroach, Blattella germanica, in 1.5 minutes when exposed to both 0.15 gm sprinkled evenly over 6 in. x 6 in. aluminum foil panels and 0.1 gm at the bottom of plastic cups; (6) residual control of adult male German cockroach in 48 hours following 24 hours exposure to 0.09 gm deposit on 6 x 6 aluminum foil panels aged up to 18 weeks and 0.09 gm on 6 x 6 plywood panels aged up to 26 weeks, and total knockdown on foil in 5 and 10 minutes respectively with 2 very similar formulations aged 1 day and on plywood in 10 and 15 minutes respectively with the same 2 formulations aged 1 day, but total knockdown on foil only in 24 hours of 1 of 2 formulations but in 20 minutes of the other aged 14 weeks, but total knockdown on plywood only in 24 hours of both formulations of the same age; (7) kill adult female mosquito, Aedes aegypti, in 24 hours following 1 hour forced exposure to 0.42 gm/ft<sup>2</sup> deposit in paper cups; and (8) residual control of mixed-sex adults of the following stored product pests: confused flour beetle, Tribolium confusum, rice weevil, Sitophilus oryzae and sawtoothed grain beetle, Oryzaephilus surinamensis, through 48 weeks following continuous exposure to 1.5 oz. per 100 ft2 in clear plastic containers. The deposit rates in these tests simulate those that would be expected following application of the subject product to surfaces according to label directions. Therefore, they adequately support the following front panel claims for the subject product: "...provides quick [fast] [rapid] control"; "...kills [controls] [keeps on working for] up to 6 months when undisturbed"; "...can be used in homes, institutions, food/feed plants and many other areas". The other numerous claims on the label for the subject product are supported by existing registrations of pyrethrum-piperonyl butoxide-silicon dioxide formulations for these sites and pests. Two of the most nearly identical to the subject product are: EPA Reg. No. 10088-93, "Powdered Insecticide" from Athea Laboratories and EPA Reg. No. 11715-318, "Speer Dry Insecticide", both of which are identical in active ingredient composition to the subject product and are labeled for all the pests on the labeling for the subject product and, in the case of the latter, for all of the uses on labeling for the subject product. However, the restriction of claims for fire ant mounds which was mentioned in Item 2.b. of our letter dated on April 23, 1997 for EPA Reg. No. 11715-318 is also applicable to the subject product, namely that specific data to support this public health use should be submitted. There is no such data in MRID No. 451841-02.